

INTERNATIONAL SEARCH REPORT

International Application No
PCT/JP2004/008157

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01M4/58 H01M8/02 C01B31/02 C01B31/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01M C01B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 919 589 A (KAWAKAMI ET AL) 6 July 1999 (1999-07-06) column 4, lines 52-60	1-32
A	PATENT ABSTRACTS OF JAPAN vol. 005, no. 020 (C-042), 6 February 1981 (1981-02-06) & JP 55 147561 A (ASAHI CHEM IND CO LTD), 17 November 1980 (1980-11-17) abstract	1-32
A	DATABASE WPI Section Ch, Week 197838 Derwent Publications Ltd., London, GB; Class A60, AN 1978-68031A XP002340196 & JP 53 094581 A (SINLOIHI CO LTD) 18 August 1978 (1978-08-18) abstract	1-32

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

10 August 2005

Date of mailing of the international search report

19/08/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

GONZALEZ-CUENCA, M

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP2004/008157

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 5919589	A	06-07-1999	JP	3359220 B2	24-12-2002
			JP	9245794 A	19-09-1997
JP 55147561	A	17-11-1980	NONE		
JP 53094581	A	18-08-1978	NONE		